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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE APPLICATION NO. D MIO-0020-VA/ HEMBREE 02/23/00 09/510,828 **EXAMINER** 023368 MM91/0330 KILLWORTH GOTTMAN HAGAN & SCHAEFF, LLP PAPER NUMBER **ART UNIT** ONE DAYTON CENTRE, SUITE 500 ONE SOUTH MAIN STREET DAYTON OH 45402-2023 2822

DATE MAILED:

03/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

_1		Auglication No.	Applicant(s)		
	•		Application No. Applicant(s)		
*		09/510,828	HEMBREE ET AI	HEMBREE ET AL.	
Office Action Summary		Examiner	Art Unit		
		James Mitchell	2822		
	The MAILING DATE of this communication app	pears on the cover she	et with the correspondence ad	dress	
Period fo	r Reply				
THE N - Exten after S - If the - If NO - Failui	DRTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION sions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication, period for reply specified above is less than thirty (30) days, a re period for reply is specified above, the maximum statutory perior e to reply within the set or extended period for reply will, by statu- eply received by the Office later than three months after the mail d patent term adjustment. See 37 CFR 1.704(b).	136 (a). In no event, however ply within the statutory minimu d will apply and will expire SIX	, may a reply be timely filed m of thirty (30) days will be considered time (6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).	ely. communication.	
1)	Responsive to communication(s) filed on 16	<u> March 2001</u> .			
2a)□	This action is FINAL . 2b)⊠ 3	This action is non-fina			
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposit	ion of Claims				
4)	Claim(s) 29-71 and 73 is/are pending in the	application.			
	4a) Of the above claim(s) 32-35,41-43,48,49	,52,53,57-62,66 and	67 is/are withdrawn from consi	deration.	
5)[
6)[]	6) Claim(s) <u>29-31,36-40,44-47,50,51,54-56,63-65,68,69 and 73</u> is/are rejected.				
7)	Claim(s) is/are objected to.				
8)[Claims are subject to restriction and	I/or election requirem	ent.		
Applicat	ion Papers				
	The specification is objected to by the Exam	niner.			
10)	in/org phiograph by the Examiner				
11)	is: a) approved b) disapproved.				
12)	وطلان والمقام والمتاز				
·	under 35 U.S.C. § 119				
421	Acknowledgment is made of a claim for fore	eign priority under 35	U.S.C. § 119(a)-(d) or (f).		
) All b) Some * c) None of:	-			
l a	The second secon	ents have been recei	ved.		
Certified copies of the priority documents have been received in Application No Certified copies of the priority documents have been received in Application No					
	2 Copies of the certified copies of the priority documents have been received in this National Stage				
* See the attached detailed Office action for a list of the certified copies not received.					
14)⊠	Acknowledgement is made of a claim for d	omestic priority under	35 U.S.C. § 119(e).		
A44	nnt(c)				
Attachm	ent(s) lotice of References Cited (PTO-892)	18)	Interview Summary (PTO-413) Pap	er No(s)	
16) 🗆 N	lotice of References Cited (P10-692) lotice of Draftsperson's Patent Drawing Review (PTO-94 nformation Disclosure Statement(s) (PTO-1449) Paper N	8) 19)	Notice of Informal Patent Application	n (PTO-152)	

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DETAILED ACTION

1. This office action is in response to the species election and amendment filed March 16, 2001.

Election

- 2. Claims 32-35,41-43,48,49,52,53,57-62,66,67 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected species, being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8. Applicant's election without traverse of claims 29-31,36-40,44-47,50,51,54-56,63-65,68,69,73 in Paper No. 8 is acknowledged.
- 3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- Claims 29-31,36-39,44,50,51,63-65,68,69,73 are rejected under 35
 U.S.C. 103(a) as being unpatentable over Farnworth et al. (U.S 5,815,000) in view of Gabriela (IEEE, " A Comparison of Metal in Elastomer...").
- 7. Farnworth discloses interconnect structure (16) and attachment device (20,22,24), die bias through spring (Line 16, Column 8) within package, cavity within elastic member (Figure 3, item 22) and inherent variable spring constant.
- 8. Farnworth does not disclose a separate conductive member, however Gabriela teaches metal particles of Nickel and Gold in elastomer element (Figure 3). It would have been obvious to one of ordinary skill in the art to combine Farnwoth's elastomeric spring with Gabriela's metal in elastomer in order to increase corrosion resistance (Abstract).
- 9. With respect to claim 44, Farnworth discloses a hole in spring (Figure 1).

 It would have been obvious to one of ordinary skill to form a plurality of holes, since it has been held that mere duplication involves only routine skill in the art. *In re Harza*, 274 F.2d 669, *St. Regis Paper Co v Bemis*, 193 USPQ 8.

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- 10. With respect to claim 73, it would have been obvious to have a conductive member comprise carbon, since it has been held to be within the general skill of a worker in the art to select known material on basis of suitability as a matter of design choice. *In re Leshin*, 125 USPQ 416.
- 11. Claims 45, 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnworth and Gabriela as applied to claims 29-31,36-39,44,50,51 above, and further in view of Karasz et al. (U.S 5,192,479).
- Neither Farnworth nor Gabriela discloses a second elastomeric member.
 However, Karasz utilizes an elastomer dispersed throughout another elastomer member
 (Lines 6-8, Column 3; Line 10-11, Column 10).
- 13. It would have been obvious to one of ordinary skill in the art to modify

 Farnworth's elastomeric member with Karasz second elastomer material to enhance the

 properties of the composition (Lines 16-17, Column 1).
- 14. With respect to claim 45, it would have been obvious to one of ordinary skill in the art to form a second elastic member positioned in a plurality of holes, since it is a well known technique in the art to use elastomeric material as a filling for holes.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hilton (U.S 5,892,245), Johnson et al. (5,639,247), Kozel et al. (U.S 6,106,305), Lee et al. (5,014,161).

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The cited art discloses ref.1 holes filled with elastomeric material, ref. 2 plurality of holes in elastomeric member, ref. 3 shape effects of elastomeric member, and ref. 4 conductive carbon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mitchell whose telephone number is (703) 305-0244. The examiner can normally be reached on M-F 10:30-8:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead can be reached on (703) 308-4083. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3230 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

jmm March 28, 2001

Stephen D. Meier Primary Examiner